

Professional and Managerial Branch
Engineering Group
Registered Engineer Series

WATER UTILITIES ENGINEER

9/99 (SAC)

Summary

Under general direction, plan, develop and implement varied and complex engineering projects and supervise assigned professional, technical and clerical personnel.

Typical Duties

Plan, design and direct development and construction of water and wastewater facilities, construction and other engineering projects. Involves: establishing design criteria and parameters; overseeing engineering studies, drawings and calculations, including preparing plans, specifications and cost estimates; assuring designs are functional, practical and economical; determining if projects will require adjusting or relocating existing or proposed water, sewer and utility lines; preparing construction and inspection schedules; overseeing review of contracted work plans, specifications and other documents; inspecting work in progress and assuring projects meets established deadlines.

Perform studies of water supply requirements, system improvements or other special projects. Involves: analyzing existing methods and recommending modifications necessary to improve Utility operating efficiency, including new plant construction or renovation projects; appraising shortages, excesses, quality and cost of existing facilities; reviewing plans for proposed subdivisions and structures prepared by private professional engineers and architects

Supervise assigned personnel. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe working practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants and recommending selection.

Perform other professional managerial duties. Involves: substituting for supervisor or subordinates during temporary absences to maintain continuity of operation, or for coworkers regarding designated issues, if assigned; developing and implementing goals, objectives and budgets related engineering activities in an assigned area as directed; overseeing preparation of technical records and reports; representing the Water Utilities at public hearings and meetings.

Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Sanitary, Chemical or Environmental Engineering and either six (6) years of progressively responsible professional engineering experience in a water or wastewater utility, including two (2) years experience as a registered professional engineer, or four (4) years of such experience and a Master's degree in Civil, Sanitary, Chemical or Environmental Engineering; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Comprehensive knowledge of: principles and practices of civil engineering as it related to water and wastewater systems and facility design and operation; methods, materials, tools and equipment used in water and wastewater construction projects; cost determination and work efficiency techniques; safe working practices and procedures. Considerable knowledge of: supervisory techniques; federal, state and local laws, codes and ordinances as they apply to water and wastewater utility projects.

Ability to: plan, design and coordinate engineering projects; determine project costs; prepare designs, plans and specifications; interpret plans and designs and identify defects; supervise, train and evaluate assigned personnel; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees, officials and the general public; maintain records and prepare reports.

Skill in: safe use and care of personal computer or network work station, including computer-aided drafting and design (CADD) software, a motor vehicle.

Physical Requirements: Occasionally move in a field environment to inspect work in progress; drive through city traffic.

Licenses and Certificates: Registration as Professional Engineer in the State of Texas or a state having a reciprocal agreement at time of appointment. Registration as Professional Engineer in Texas required within one (1) year of appointment. Valid Texas Class "C" Driver's License or equivalent license issued by another state required by time of appointment.

Director of Personnel

Department Head